

### **Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of claims in the application.

### **Listing of Claims:**

1. (Previously Presented) A computer-implemented method of cell-based data processing that facilitates the execution of computer programming code by a computer system, the method comprising:

receiving as input computer code a data processing specification comprising a plurality of cells, wherein each cell comprises a formula specifying an action or computation to perform when the cell is executed, and one or more attributes referencing other cells, wherein the formula of a first cell may reference a value of a second cell;

wherein each cell is delineated by a beginning and ending tag, and one of the cells is reserved as an output cell for outputting a result of the processing;

parsing the specification to determine an interdependency of the plurality of cells and generating and storing a directed graph of the interdependency as an execution flow; and

executing the computer code of the specification in accordance with the execution flow, wherein the executing comprises evaluating the formula of each cell in the execution flow and generating an output result;

wherein each cell is interlocked with at least one other cell through the formula or attribute of each cell.

2. - 4. (Cancelled).

5. (Previously Presented) The method of claim 1, wherein the first cell has a first attribute referencing a second attribute of said second cell.

6. (Previously Presented) The method of claim 1, wherein said second cell comprises a reserved mnemonic for providing input to the data processing specified by the data processing specification.

7. (Previously Presented) The method of claim 1, wherein said first cell is a reserved output cell specification specifying output of the data processing specified by the data processing specification.

8. (Previously Presented) The method of claim 1, wherein said second cell comprises a conditionally executed formula.

9. (Original) The method of claim 1, wherein said data processing specification further includes one or more global attributes specifying one or more global processing characteristics for the specified data processing.

10. (Original) The method of claim 9, wherein said one or more global attributes include a global attribute specifying a format for providing the specified data processing with an HTTP request.

11. (Previously Presented) An apparatus comprising:  
at least one storage unit having stored thereon programming instructions that are configured to be executed by a computer processor and designed to:

receive as input computer code a data processing specification comprising a plurality of cells, wherein each cell comprises a formula specifying an action or computation to perform when the cell is executed, and one or more attributes referencing other cells, wherein the formula of a first cell may reference a value of a second cell;

wherein each cell is delineated by a beginning and ending tag, and one of the cells is reserved as an output cell for outputting a result of the processing;

parse the specification to determine an interdependency of the plurality of cells and generating and storing a directed graph of the interdependency as an execution flow; and

execute the computer code of the specification in accordance with the execution flow, wherein the executing comprises evaluating the formula of each cell in the execution flow and generating an output result;

wherein each cell is interlocked with at least one other cell through the formula or attribute of each cell; and

at least one processor coupled to said at least one storage unit to execute said programming instructions.

12. - 14. (Cancelled).

15. (Previously Presented) The apparatus of claim 11, wherein said programming instructions are designed to support the first cell having a first attribute referencing a second attribute of said second cell.

16. (Previously Presented) The apparatus of claim 11, wherein said programming instructions are designed to support said second cell having a reserved mnemonic for facilitating provision of input to the data processing specified by the data processing specification.

17. (Previously Presented) The apparatus of claim 11, wherein said programming instructions are designed to support said first cell being a reserved output cell specification specifying output of the data processing specified by the data processing specification.

18. (Previously Presented) The apparatus of claim 11, wherein said programming instructions are designed to support said second cell having a conditionally executed formula.

19. (Previously Presented) The apparatus of claim 11, wherein said programming instructions are designed to support said data processing specification having one or more global attributes specifying one or more global processing characteristics for the specified data processing.

20. (Original) The apparatus of claim 19, wherein said programming instructions are designed to support one of said one or more global attributes being a global attribute specifying a format for providing the specified data processing with an HTTP request.

21. (Previously Presented) A computer with a memory having stored thereon instructions that when executed cause to the computer to implement data processing comprising:

means for receiving a data processing specification comprising a plurality of cells, wherein each cell comprises a formula specifying an action or computation to perform when the cell is executed, and one or more attributes referencing other cells, wherein the formula of a first cell may reference a value of a second cell;

wherein each cell is delineated by a beginning and ending tag, and one of the cells is reserved as an output cell for outputting a result of the processing;

means for parsing the specification to determine an interdependency of the plurality of cells and generating and storing a directed graph of the interdependency as an execution flow; and

means for executing the specification in accordance with the execution flow, wherein the executing comprises evaluating the formula of each cell in the execution flow and generating an output result;

wherein each cell is interlocked with at least one other cell through the formula or attribute of each cell.

22-25. (Cancelled).